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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,639	10/24/2003	Hsiang-An Hsieh	BHT/3134-135	7623
7590 03/01/2006 TROXELL LAW OFFICE PLLC SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041			EXAMINER DILLON, SAMUEL A	
			ART UNIT 2185	PAPER NUMBER
DATE MAILED: 03/01/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/691,639

**Applicant(s)**

HSIEH ET AL.

**Examiner**

Sam Dillon

**Art Unit**

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This Office Action is in response to the preliminary amendment filed October 24, 2003.
2. The instant application having Application No. 10/691,639 has a total of 11 claims pending in the application; there is 1 independent claim and 10 dependent claims, all of which are ready for examination by the examiner.

#### **I. INFORMATION CONCERNING OATH/DECLARATION**

3. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. ' 1.63.

#### **II. STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION**

4. As required by M.P.E.P. ' 201.14(c), acknowledgment is made of applicant's claim for priority based on an application filed in July 22, 2003.

#### **III. INFORMATION CONCERNING DRAWINGS**

5. The applicant's drawings submitted October 24, 2003 are acceptable for examination purposes.

**V. OBJECTIONS TO THE APPLICATION**

***Title***

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: USB TO COMPACT MEMORY CARD CONVERSION CONTROLLER.

***Abstract***

7. The abstract of the disclosure is objected to because it contains idiomatic English. Correction is required. See MPEP § 608.01(b).

***Specification***

8. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification must be accompanied by a statement that it contains no new matter.

9. The specification is additionally objected to because of the following:

- a. It contains a copy of the abstract on lines 5-15 of page 1.
- b. It contains a duplicate copy of a portion of the brief description of figures on line 17 of page 1 through line 1 of page 2.

Appropriate correction is required.

**VI. REJECTIONS NOT BASED ON PRIOR ART**

***Claim Rejections - 35 USC ' 112 – Idiomatic English***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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11. **Claims 1-11** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. The applicant is required to submit substitute claims.

**Claim Rejections - 35 USC ' 112 – Trademarks in Claim Language**

12. **Claims 7-8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. **Claim 7** contains the trademark/trade name “CF card” on line 4 of the claim. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe specific implementations of small memory card interfaces and, accordingly, the identification/description is indefinite.

14. **Claim 8** contains the trademark/trade names “CF card”, “SD card”, “MMC card” and “MS card” on line 3 of the claim. The trademark/trade name is used to identify/describe specific implementations of small memory card interfaces and, accordingly, the identification/description is indefinite.

**Claim Rejections - 35 USC ' 112 – Indefinite Language**

15. **Claims 7-9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. As per **Claim 7**, it is unclear what the Applicant intends the phrasing “maybe” on line 3 of the claim to mean. For the purposes of further examination, the Examiner will interpret lines 2-3 of the claim as reading “*wherein the conversion controller is in-built*”.

17. As per **Claim 8**, it is unclear what the Applicant intends the phrasing “may be” on line 3 of the claim to mean. For the purposes of further examination, the Examiner will interpret lines 2-3 of the claim as reading “*wherein the similar memory card is CF card, SD card, MMC card, MS card or small memory card with controller*”.

18. As per **Claim 9**, it is unclear whether the limitation claims that the USB interface is built-in, the USB interface is a cable that is built in, that the USB interface accepts a USB cable, or another concept entirely. It is additionally unclear whether the applicant intends the phrasing “USB style” to include only USB interfaces. For the purposes of further examination, the Examiner will interpret the claim as reading “*wherein the USB interface of similar memory card is **built-in and connects with USB devices***”.

**VII. REJECTIONS BASED ON PRIOR ART**

**Claim Rejections - 35 USC ' 103 – Terasaki and Assour**

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Terasaki et al. (*US Patent Number 6,292,863*) in view of Assour et al. (*US Patent Number 6,434,648*), in so far as they are clear in light of the 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejections supra.

21. As per **Claim 1**, Terasaki discloses a controller with small memory card interface switch USB interface, the controller at least comprise

a small memory interface (*pc card physical layer interface 42, figure 4*) connecting with small memory card electric interface (*PC card interface, column 6 lines 42-43*) in information appliances (*portable PC, column 6 line 40*),

an electric interface (*PC card interface, column 6 line 47*) for imitating (*column 6 lines 35-38*) standard small memory card,

microprocessor (*flash controller 46, figure 4*) of instruction group and communication protocol (*predetermined function, column 6 line 34*) and

an USB interface (*USB physical interface 43, figure 4*) for connecting with USB memory device (*desktop PC, column 6 lines 56-57*);

Terasaki does not disclose the controller enabling the small memory card interface in information appliances to access the pocket disk and relative memory device connecting with USB interface by proper transfer mechanism.

Assour discloses the controller (*controller 16, figure 1*) enabling (*column 2 lines 14-19*) the small memory card interface (*parallel interface 14, figure 1*) in information appliances (*external host computer, column 2 lines 17-18*) to access (*column 2 lines 15-16*) the pocket disk (*external memory card, column 2 line 15*) and relative memory device connecting with memory device interface (*serial I/O port 12, figure 1*) by proper transfer mechanism.

Terasaki and Assour are analogous art in that they deal with PCMCIA cards with a plurality of interfaces. Terasaki discloses that the USB and PC card interfaces are attached to a multiplexer (*multiplexer 21, figure 2*) which is then connected to the flash controller (*column 9 lines 8-29*), allowing either the USB interface to connect to the controller (*bus 106 and bus 110*) or the PC card interface to connect to the controller (*bus 106 and bus 108*). For information to move from one interface to the other, it would first have to be copied to memory (*flash memory 41-3, figure 4*). It would have been obvious to one with ordinary skill in the art at the time of the invention to modify Terasaki's memory card to add Assour's controller (*control 16, figure 1*) to enable communication through the device.

The motivation for doing so would have been to allow the host computer to communicate to a non-PCMCIA external memory card through the existing PCMCIA memory card (*Assour, column 9 line 64 through column 10 line 3*). Additionally,



Terasaki discloses that USB is rapidly becoming a de-facto standard (*column 7 lines 40-43*).

Therefore, it would have been obvious to combine Terasaki's memory card with Assour's cross-card communication for the benefit of reading USB memory devices through a PCMCIA interface to obtain the invention of Claim 1.

22. As per **Claim 2**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

data transfer buffer area (*Terasaki, flash memory 41-3, figure 4*) being disposed between (*Terasaki, see figure 4*) small memory card interface and USB interface to provide small memory card interface and USB interface with data transmission (*Assour, column 2 lines 15-16*).

23. As per **Claim 3**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

conversion controller therein provided with program card memory (*Assour, ROM 15, figure 1*) to storage the controlling program (*Assour, program, column 4 line 59*) of controlling microprocessor (*Assour, controller 16, figure 1*) to simulate small memory card, access date (*Assour, column 11, lines 44-46*), and access control program (*Assour, column 4 lines 13-16*) of USB interface storage device.

24. As per **Claim 4**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

the conversion controller therein provided with electric power manage circuit (*power source control circuit, column 5 line 54*) and/or PLL oscillator circuit to maintain the normal operation of conversion controller.

The phrasing "*and/or*" is interpreted to require either the limitation the limitation that immediately precedes it ("*electric power manage circuit*") or the limitation immediately following it ("*PLL oscillator circuit*") or both.

25. As per **Claim 5**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1,

wherein conversion controller therein provided with external memory interface (*Terasaki bus C connection to flash memories 41-1 and 41-2, figure 4*) to increase external memory (*flash memories 41-2 and 41-2*), to increase the capacity of buffer area and used for data transfer buffer area.

6. As per **Claim 6**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

USB storage device is silicon disk machine/hard silicon disk machine/disk/diskette machine (*Terasaki, desktop PC, column 6 lines 56-57*).

26. As per **Claim 7**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

the conversion controller maybe in-build (*Terasaki, interpreted as 'built in', see figure 4*) in similar small memory card, the similar CF card being provided on one side thereof a small memory card interface (*Terasaki, PC card physical layer interface 42, figure 4*) to electrically connect with small memory card electric

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interface (*PC card interface, column 6 lines 42-43*) of information appliances (*portable PC, column 6 line 40*), and

in interior thereof circuit board (*Terasaki, bus A, figure 4*) to electrically connect with conversion controller (*Terasaki, flashcontroller 46 with PCMCIA ATA interface 45 and IDE interface 47, figure 4*) and said small memory card interface (*Terasaki, PC card physical layer interface 42, figure 4*), the USB interface (*Terasaki, USB physical interface 43, figure 4*) used for connecting (*Terasaki, column 6 lines 49-51*) with pocket disk [Thumbdrives] and/or relative storage device (*Terasaki, desktop PC, column 6 lines 56-57*) with USB interface, so by the conversion device enable (*Assour, column 2 lines 14-19*) small memory card electric interface of information appliances conversion to access (*Assour, column 2 lines 15-16*) to USB pocket disk and USB relative storage device.

As per the 35 U.S.C. 112 2<sup>nd</sup> rejection of Claim 7 above, the limitation starting “*the conversion controller **maybe** in-build ...*” has been interpreted by the examiner as “*the conversion controller **is** in-build*”.

27. As per **Claim 8**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 7, wherein

the similar memory card may be CF card, SD card, MMC card, MS card and small memory card (*Terasaki, column 1 lines 24-32 and card 40, figure 4*) with controller (*Terasaki, flash controller, figure 4*).

The Examiner notes that the phrasing “*may be*” does not require the similar memory card to be any of the listed types. However, examiner interprets this limitation as other embodiments of the PC card, as disclosed by Terasaki (*column 2 lines 7-36*).

28. As per **Claim 9**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 1, wherein

USB interface (*Terasaki, USB physical interface 43, figure 4*) of similar memory card (*Terasaki, element 40, figure 4*) is in-build (*Terasaki, interpreted as built in, column 6 lines 49-59 and figure 4*) and USB style with cable (*Terasaki, interpreted as connects with USB devices, column 6 lines 1-2*).

29. As per **Claim 10**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 2, wherein

conversion controller therein provided with program card memory (*Assour, ROM 15, figure 1*) to storage the controlling program (*Assour, program, column 4 line 59*) of controlling microprocessor (*Assour, controller 16, figure 1*) to simulate small memory card, access date (*Assour, column 11, lines 44-46*), and access control program (*Assour, column 4 lines 13-16*) of USB interface storage device.

30. As per **Claim 11**, Terasaki and Assour disclose a controller with small memory card interface switch USB interface as claimed in claim 2, wherein

the conversion controller therein provided with electric power manage circuit (*Terasaki power source control circuit, column 5 line 54*) and/or PLL oscillator circuit to maintain the normal operation of conversion controller.

**VIII. RELEVANT ART CITED BY THE EXAMINER**

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aronson et al. (*US Patent Number 6,128,673*) discloses a method for converting from one digital protocol to another.

Silverman et al. (*US Patent Number 6,370,603*) discloses a controller for converting from USB to Ethernet.

Yao (*US Patent Numbers 6,385,677 and 6,658,516*) discloses a USB adapter with a memory card interface.

Sarat (*US Patent Number 6,581,122*) discloses a smart card with a USB interface.

Hsieh et al. (*US Patent Number 6,761,313*) discloses a memory card adapter with a memory card form factor.

**IX. CLOSING COMMENTS**

**Conclusion**

**a. STATUS OF CLAIMS IN THE APPLICATION**

32. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. ' 707.07(i):

**a(4). CLAIMS REJECTED IN THE APPLICATION**

33. Per the instant office action, claims 1-11 have received a first action on the merits and are subject of a first action non-final.

**b. DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Dillon whose telephone number is 571- 272-8010. The examiner can normally be reached on 8:30-5:00.

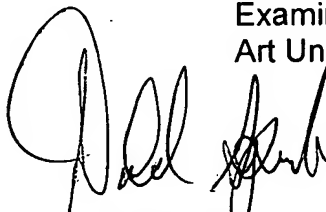
***IMPORTANT NOTE***

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAD

Sam Dillon  
Examiner  
Art Unit 2185



**DONALD SPARKS**  
**SUPERVISORY PATENT EXAMINER**